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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,875	07/30/2003	Garry E. Balthes	29595/82608	7941

7590 01/30/2006

BARNES & THORNBURG  
600 One Summit Square  
Fort Wayne, IN 46802

EXAMINER
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BOYD, JENNIFER A

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 01/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/630,875

Applicant(s)

BALTHES ET AL.

Examiner

Jennifer A. Boyd

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) 1-18 and 27-41 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 19-26, 42 and 43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. The Applicant's Amendments and Accompanying Remarks, filed October 31, 2005, have been entered and have been carefully considered. Claim 19 is amended, claims 42 – 43 are added and claims 1 – 18 and 27 – 41 are withdrawn. In view of Applicant's amendment requiring that the core comprises a binding resin and randomly-oriented natural fibers "dispersed throughout the layer's thickness", the Examiner withdraws all previously set forth rejections as detailed in Office Action dated July 15, 2005. After another search was conducted, additional prior art has been found which renders in the invention as currently claimed unpatentable for reasons herein below.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Objections***

3. Claim 22 is objected to because of the following informalities: the word "cellulose" is misspelled. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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5. Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
6. Claim 20 recites the limitation "the sisal" in line 3 of the claim. There is insufficient antecedent basis for this limitation in the claim. Please amend the claim.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 19, 21 – 22, 26 and 43 are rejected under 35 U.S.C. 102(e) as being anticipated by Jarrard et al. (US 6,871,898).

Jarrard is directed to a soft cover for vehicles and process for making (Title).

As to claim 19, Jarrard teaches a composite comprising a water resistant top layer, a flexible foam layer and a protective bottom layer (Abstract). See Figure 1. Jarrard teaches that the water resistant top layer can comprise film wherein the film is water-resistant (column 3, lines 5 – 55). The Examiner equates the water resistant top layer to Applicant's "permeability-resistance film layer". Jarrard teaches that the flexible foam layer can comprise a thin layer of foam, preferably from 0.2 – 3 mm (column 4, lines 15 – 25), of a polymeric material (columns 4 – 5). The foam may be reinforced by fibers such as cotton, silk, wool or the like (column 5, lines

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25 – 30). It should be noted that the fibers may be incorporated into the foam (column 5, lines 30 – 40), therefore, it is the position of the Examiner that the natural fibers are dispersed throughout the thickness of the foam layer. The Examiner equates the flexible foam layer to Applicant's "headliner core layer", the foam to Applicant's "binding resin" and the incorporated fibers to Applicant's "randomly-oriented natural fibers". Jarrard teaches a bottom protective layer comprising a woven fabric having a stain resistant treatment such as PREFIXX or SCOTCHGUARD, a TEFLON coating or other treatments that provides satisfactory protection from incidental moisture or other assaults (column 6, lines 1 – 10). The Examiner equates the bottom protective layer of woven fabric to Applicant's "woven fiber layer" and the coating to Applicant's "film layer".

As to claim 21, Jarrard teaches that the woven fabric used for the protective bottom layer may be selected from the same materials suitable for use in the water-resistant top layer (column 5, lines 55 – 60). Jarrard teaches that the woven fabric may comprise polyester (column 4, lines 5 – 10).

As to claim 22, Jarrard teaches that the woven fabric used for the protective bottom layer may be selected from the same materials suitable for use in the water-resistant top layer (column 5, lines 55 – 60). Jarrard teaches that the woven fabric may comprise cotton, polypropylene or a combination of these yarns (column 4, lines 5 – 10).

As to claim 26, Jarrard teaches that the film layer has a thickness ranging from about 0.1 – 0.6 mm (column 3). It should be noted that about 0.1 mm is approximately 4 mil.

As to claim 43, Jarrard teaches that the foam, or "binding resin", can comprise polypropylene (column 5, lines 15 – 30).

***Claim Rejections - 35 USC § 103***

9. Claim 23 - 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jarrard et al. (US 6,871,898).

As to claims 23 and 25, Jarrard discloses the claimed invention except for that the film layer is polypropylene as required by claim 23 and the binding resin is a nylon film layer as required by claim 25. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a polypropylene film for the film layer as required by claim 23 and a nylon film layer for the binding resin as required by claim 25 since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of design choice. *In re Leshin*, 125 USPQ 416. In the present invention, one would have been motivated to use polypropylene as the film layer motivated by the cost and its stain resistance. It should be noted that Jarrard teaches that the coating is a stain resistant treatment; it is known in the art that polypropylene is stain resistant. In the present invention, one would have been motivated to use nylon due to its excellent strength, flexibility, toughness and elasticity. It should be noted that Jarrard teaches that the plastic used for the foam may be any plastic which can be foamed; it is known in the art that nylon can be foamed.

As to claim 24, Jarrard discloses the claimed invention except for that the film layer is 4 mil. Absent evidence of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to create a film having a thickness of 4 mil, since it has been held that where general conditions of a claim are disclosed in the prior art,

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discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454 USPQ 233 (CCPA 1955). In the present invention, one would have been motivated to optimize the film thickness in order to create a composite having optimal strength and flexibility.

10. Claims 20 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jarrard et al. (US 6,871,898) in view of Spengler et al. (US 5,709,925).

Jarrard teaches the claimed invention above but fails to teach that a portion of the randomly-oriented natural fibers can comprise sisal as required by claim 42.

Spengler et al. is directed to a multi-layered panel having a core including natural fibers (Title). Spengler teaches a laminate comprising a core including natural filler fibers embedded in a thermoplastic matrix and two cover layers (Abstract). Spengler teaches that the core layer includes a fibrous filler material which is preferably a natural fiber material (column 4, lines 59 – 61). Spengler teaches that the natural fiber material may include straw, cotton, flax, sisal, hemp, jute, or the like, or combinations thereof, and preferably includes flax and/or sisal (column 4, lines 59 – 64). Spengler teaches that the specific material to be used in a particular application can be selected depending upon the desired characteristics of the finished panel and depending on the current price and availability of various natural fibers (column 4, lines 59 – 69).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate sisal fibers as a portion of the natural fibers as suggested by Spengler in the foam layer of Jarrard motivated by the desire to use a functionally equivalent fiber based on the cost and availability various natural fibers and desired characteristics of the panel.

As to claim 20, Jarrard in view of Spengler discloses the claimed invention except for that the binding resin is present in the amount of 25 – 35% by weight, the sisal is present in an amount of about 35 – 45% by weight and the natural filler fibers are present in the amount of about 25 – 35% by weight. Absent evidence of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to create a composite comprising binding resin present in the amount of 25 – 35% by weight, the sisal is present in an amount of about 35 – 45% by weight and the natural filler fibers are present in the amount of about 25 – 35% by weight, since it has been held that where general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454 USPQ 233 (CCPA 1955). In the present invention, one would have been motivated to optimize the amount of amount of sisal, binder and natural filler fiber to create a core with optimum strength and stability.

Additionally, it should be noted that it has been held that “It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art.” *In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980). In this particular case, Jarrard teaches the use of natural fibers such as cotton to structurally reinforce a resin layer and Spengler teaches the use of natural fibers and combinations thereof including cotton and sisal to structurally reinforce a resin layer. In light of this case law, it would have been obvious to use a



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combination of both cotton (or other natural fibers disclosed by Jarrard) and sisal as disclosed by Spengler to reinforce a resin layer.

***Response to Arguments***

11. Applicant's arguments with respect to claims 19 – 26 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Jacobsen is directed to a five-layer sound absorbing pad comprising a scrim/film/batt/film/scrim (Abstract). Jacobson does not teach that the location one of the film layers and scrim layers can be interchanged which would result in Applicant's structure.

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

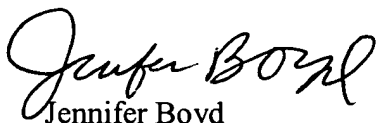
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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A. Boyd whose telephone number is 571-272-1473. The examiner can normally be reached on Monday thru Friday (8:30am - 6:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Jennifer Boyd  
January 17, 2006

  
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